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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,022	12/21/2000	Eiichi Kito	Q62254	6674

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

PHAM, HAI CHI

ART UNIT PAPER NUMBER

2861

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,022

Applicant(s)

KITO, EIICHI

Examiner

Hai C Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 is/are allowed.
- 6) ☒ Claim(s) 1-5, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 6-8, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/22/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Collier (U.S. 5,636,001).

Collier discloses a digital camera capable of printing image from a photographic negative (230, Fig. 2) onto photographic paper (190) using a spatial light modulator (20), the device comprises at least one light source (270) for generating light, a spatial light modulator (deformable mirror device 20), disposed in a traveling path of said light, including plural micromirrors arranged in at least one array, and individually shiftable between first and second positions different in a direction (light paths 440 and 430, respectively), a pick-up section (charged coupling device 40), disposed in a traveling path of said light reflected by said plural micromirrors in said first position (light path 440), for picking up a picture image in photo film (photographic negative 230)

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illuminated by said light, to output image data (to be stored in the image storage medium 80), a printing projecting optical system (projection lens 200), disposed in a traveling path of said light reflected by said plural micromirrors in said second position (light path 430), for focusing and recording a print image to photosensitive material (photographic paper 190), a controller (image projection CPU 140) for control in a pick-up mode and a printing mode, wherein when in said pick-up mode, said controller sets said plural micromirrors in said first position, to illuminate said picture image in said photo film, and operates said pick-up section to obtain said image data, when in said printing mode, said controller selectively sets said plural micromirrors in said second position according to said image data, for recording of said print image with said printing projecting optical system (col. 3, line 53 to col. 4, line 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier and Wagensonner (U.S. 5,696,616).

Collier discloses all the basic limitations of the claimed invention except for the pick-up optical system, the plural micromirrors being disposed in a matrix form, the photo feeder and the photosensitive material feeder.

Wagensonner discloses a scanning method and apparatus using a digital micromirror device (2 of Fig. 1 or 26 of Fig. 4) having a plurality of micromirrors (3), which can be arranged as either a two-dimensional array (Fig. 1) or a linear array (Fig. 4) for reflecting the incident light beam and a focusing lens (6) for focusing the reflected light beam toward a sensing unit. Wagensonner further teaches the provision of a film (40) whose frames (41) are scanned and captured by the sensing unit (43) one at a time while being transported in the direction B (Fig. 4) and the captured image data being printed on the photographic paper (59) while being transported through the copying station (55).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Collier with the aforementioned teachings of Wagensonner. The motivation for doing so would have been to allow each of the image frames being well focused on and properly captured by the sensing unit and consequently printed on the photographic paper.

Allowable Subject Matter

6. Claims 9-13 are allowed.
7. Claims 6-8 and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is an examiner's statement of reasons for allowance: The primary reason for the indication of the allowability of claim 9 is the inclusion therein, in

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combination as currently claimed, of the indicator screen on which a simulated image is projected during a simulating mode using a single spatial light modulator whose micromirrors are selectively set in a first position according to an image data and wherein the micromirrors are selectively set in a second position according to the image data during the printing mode. The combined limitations are not found taught the prior art of record considered alone or in combination.

The primary reason for the indication of the allowability of claims 6 and 16, is the inclusion therein, in combination as currently claimed, of the limitation "wherein said controller controls said at least one light source in different conditions between said pick-up mode and said printing mode", which is not found taught the prior art of record considered alone or in combination.

Claims 7-8, 10-13 and 17-18 are allowable because they are directly or indirectly dependent from claims 6, 9 and 16 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Allowable Subject Matter

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

September 27, 2004